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Junko Sato

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EXAMINER

DICKERSON, CHAD S

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/733,296 | Applicant(s) SATO, JUNKO | |
| | Examiner CHAD DICKERSON | Art Unit 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/16/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 16-19 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 16-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/16/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 13-26 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claims has necessitated a new ground(s) of rejection. However, the same references of Iwata '666 and Iwata '665 are still being applied. The reference of Yagita '908 is being applied to read on the newly introduced claim amendment through the supplemental amendment filed on 4/16/2010. In figure 25 of the Yagita '908 reference, a priority order of alternate printers during the redirect printing condition during an error is displayed¹. With the Yagita '908 reference used to cure any deficiencies of the Iwata '666 and '665 references, the claim language is believed to be disclosed.

¹ See Yagita '908 at ¶ [0013] and [0169]-[0175].

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 25 is considered to be non-statutory since it is construed to cover both non-statutory and statutory subject matter. It is recommended that the claim language be amended by adding the limitation of "non-transitory" to the claim language to narrow the claim to only cover statutory elements or embodiments of the computer readable medium disclosed in the invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-17, 19-23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata '666 (Us Pub 2002/0163666) in view of Iwata '665 (Us Pub 2002/0163665) and Yagita '908 (Us Pub 2004/0036908).

Re claim 13: Iwata '666 discloses a control method in a printing control apparatus capable of executing printing processing of a predetermined output method using a plurality of member printers grouped as a virtual printer, said method comprising:

a registration step of registering a plurality of the member printers as a virtual printer (i.e. figures 42 and 43 are used to register a plurality of member printers as a virtual printer with a particular printer name; see fig. 42 and 43, ¶ [0378]-[0381]);

a setting step of setting a virtual printer registered in the registration step to any one of a plurality of output methods about how to use the plurality of member printers (i.e. figures 6 and 9 are used as interfaces where a user can set up a virtual printer to a particular part of printing method such as a recovery printer or a distributed printing method; see ¶ [0222]-[0229]); wherein the output methods include (a) a redirect printing method which automatically switches, when an error occurs in a printer to which a print job has been transmitted, to another printer of the plurality of member printers (i.e. as seen in figure 6, a virtual printer is able to be setup as a recovery printer when a current printer being used encounters an error; see ¶ [0222]-[0229]), and (b) a distributed printing method which distributes a print job to the plurality of member printers (i.e. as disclosed in figure 9, the user is able to have a print job output through a distributed printing method; see ¶ [0222]-[0229]);

a receiving step of receiving an instruction to display a user interface for setting print properties of a designated virtual printer (i.e. when a user actuates the IC4 “Distributed Printing” icon, the windows showing figures 6 and 9 can be displayed. the

actuation of the IC4 icon is considered as receiving an instruction to display an interface for setting certain printing properties; see ¶ [0194]-[0197]);

a checking step of checking, upon receiving the instruction, which output method is set for the designated virtual printer (i.e. when a user enters in the different commands associated with an output method, the user can check which output method is designated for a certain virtual printer or group printer. In addition, the system checks to see if a recovery printer is configured and available for use when the system encounters an error of a current printer. Lastly, when a job is sent to the system, the system checks to see if the job is to be distributed as a distributed print job; see ¶ [0222]-[0229]);

a first providing step of providing, when the virtual printer set to a first output method is designated (i.e. the user in the system is able to designate distributed printing in the system. This is considered as the first output method; see fig. 9; paragraphs [0194]-[0197]), a first user interface of the virtual printer by performing a conflict process of functions of the plurality of member printers grouped as the virtual printer to compare function of the plurality of member printers (i.e. in the “Distributed Printing Properties” settings, the information that is accepted as input data describing the output of the image data is limited to the performance information of the respective printers. The performance information that is greater than the performance information of the printers is restricted from being chosen as an option. This is an example of the conflicting process since the performance information is being used to determine what paper size and other features are supported by the printers in the distributed printing option; see

paragraphs [0178]-[0182] and [0225]-[0239]), the first user interface not including a setting item for independently setting the plurality member printers grouped as the virtual printer (i.e. in the system, the “Distributed Printing Properties” tab sets a couple of options to be used in regards to a job being printed on a printer. This tab does not independently set an option for an individual printing device in the interface screen; see paragraphs [0178]-[0182] and [0225]-[0239]); and

a second providing step of providing, when the virtual printer set to a second output method is designated (i.e. in the system, when the user is designating the recovery printer in the system, this is an example of designating a second output method on the user interface; see figs. 5 and 6; see paragraphs [0198]-[0212]), a second user interface of the virtual printer without performing the conflict process (i.e. within the “Distribution Setting” dialogue box, the system is performing settings of the virtual printer selected in figure 5. At this point in selecting the recovery printer or setting other printing options, the conflict process is not performed; see figs. 6, 32, 37 and 40; paragraphs [0198]-[0212] and [0367]-[0370]), the second user interface (a) including a setting item for independently setting a representative member printer of the plurality of member printers (i.e. the Iwata ‘666 reference performs the function of including a setting item for a representative member printer of a plurality of member printers through the settings seen in figure 11. The different printers associated with the printer group can be set independently. If a printer is the only printer apart of a group, it can have settings associated with the printer changed. Also, this same printer can be apart of another group. The other group the printer may be apart of will not be effect by

Art Unit: 2625

one printer's settings change within another group; see figs. 9 and 39-43, paragraphs [0225]-[0230] and [0373]-[0383]) and (b) not including a setting item for independently setting other member printers of the plurality of member printers grouped as the virtual printer (i.e. the distribution settings are options that the user can choose that do not change any specific setting of an independent printing device that is apart of some printing group such as "Monochrome printer". Instead, these settings are specific to the job itself and how this job is processed or distributed to other printing devices. The different tabs CD1 and CD2 can be displayed individually as they appear in Iwata '666 figures 6 and 9, or the tabs with the above features can appear all at once. With the tabs being able to be shown at the same time on the screen, the feature of having both screens allowing for independently setting a printing device and not including a setting for independently setting a member printer that is apart of the virtual printer; see figs. 39-43, paragraphs [0154]-[0157] and [0373]-[0390]).

However, Iwata '666 fails to specifically teach including a setting item for independently setting a representative member printer of the plurality of member printers grouped as the virtual printer.

However, this is well known in the art as evidenced by Iwata '665. Iwata '665 discloses a setting item for independently setting a representative member printer of the plurality of member printers grouped as the virtual printer (i.e. Iwata '665 like '666 discloses sending a job to a virtual printer to print out a job in a certain manner (same field of endeavor). However, as shown in figure 35, the user is able to select a printing device independently and change some of the settings related to the selected printing

device; see ¶ [0294]-[0298]).

Therefore, in view of Iwata '665, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of As shown in figure 35, the user is able to select a printing device independently and change some of the settings related to the selected printing device, incorporated in the device of Iwata '666, in order to exclude certain printer that are apart of a printing group from a setting (as stated in Iwata '665 ¶ [0296]).

However, the combination of Iwata '666 and Iwata '665 fails to specifically teach and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs.

However, this is well known in the art as evidenced by Yagita '908. Yagita '908 discloses and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs (i.e. like the systems of Iwata '666 and '665, Yagita '908 discloses an invention that sends print jobs to a printer driver associated with a certain printer (same field of endeavor). Nonetheless, the Yagita '908 reference discloses an output method that shows different printing devices used as alternate printing devices when an error is caused in a current printer. As shown in figure 25, the priority order is shown for each printer; see ¶ [0013], [0169]-[0175] and [0240]-[0257]).

Therefore, in view of Yagita '908, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs, incorporated in the device of Iwata '666, as modified by Iwata '665, in order to have a job be output by an alternate printer with the highest priority (as stated in Yagita '908 ¶ [0245]).

Re claim 16: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the method according to claim 13, wherein the second user interface comprises a user interface of a printer driver of the representative member printer and a user interface of a printer driver of the virtual printer (i.e. shown in figure 5 is an example of a user interface that displays a printer driver of a printer that can be apart of a particular group and a virtual printer driver that represents a virtual printer; see fig. 5; paragraph [0198]).

Re claim 17: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the method according to claim 13, wherein the user interface of the printer driver of the virtual printer in the second output method contains a setting item for creating intermediate data (i.e. in the system, the information regarding the basic

settings and the performance information of the respective printers represented by the virtual printer driver are all converted into print data for the virtual printer driver. The print data is then output to the HDD (41) as intermediate print data. The basic information regarding the printing and paper settings are converted into intermediate print data, and the printing and paper settings are considered as the setting items used for creating the intermediate data; see paragraphs [0231]-[0240]).

Re claim 19: Iwata '666 discloses a printing control apparatus capable of executing printing processing of a predetermined output method using a plurality of member printers grouped as a virtual printer, said apparatus comprising:

registration means for registering a plurality of the member printers as a virtual printer (i.e. figures 42 and 43 are used to register a plurality of member printers as a virtual printer with a particular printer name; see fig. 42 and 43, ¶ [0378]-[0381]);

setting means for setting a virtual printer registered in the registration step to any one of a plurality of output methods about how to use the plurality of member printers (i.e. figures 6 and 9 are used as interfaces where a user can set up a virtual printer to a particular part of printing method such as a recovery printer or a distributed printing method; see ¶ [0222]-[0229]); wherein the output methods include (a) a redirect printing method which automatically switches, when an error occurs in a printer to which a print job has been transmitted, to another printer of the plurality of member printers (i.e. as seen in figure 6, a virtual printer is able to be setup as a recovery printer when a current printer being used encounters an error; see ¶ [0222]-[0229]), and (b) a distributed

printing method which distributes a print job to the plurality of member printers (i.e. as disclosed in figure 9, the user is able to have a print job output through a distributed printing method; see ¶ [0222]-[0229]);

receiving means for receiving an instruction to display a user interface for setting print properties of a designated virtual printer (i.e. when a user actuates the IC4 “Distributed Printing” icon, the windows showing figures 6 and 9 can be displayed. the actuation of the IC4 icon is considered as receiving an instruction to display an interface for setting certain printing properties; see ¶ [0194]-[0197]);

checking means for checking, upon receiving the instruction, which output method is set for the designated virtual printer (i.e. when a user enters in the different commands associated with an output method, the user can check which output method is designated for a certain virtual printer or group printer. In addition, the system checks to see if a recovery printer is configured and available for use when the system encounters an error of a current printer. Lastly, when a job is sent to the system, the system checks to see if the job is to be distributed as a distributed print job; see ¶ [0222]-[0229]);

first providing means for providing, when a virtual printer set to a first output method is designated (i.e. the user in the system is able to designate distributed printing in the system. This is considered as the first output method; see fig. 9; paragraphs [0194]-[0197]), a first user interface of the virtual printer by performing a conflict process of functions of the plurality of member printers grouped as the virtual printer to compare functions of the plurality of member printers (i.e. in the “Distributed Printing Properties”

settings, the information that is accepted as input data describing the output of the image data is limited to the performance information of the respective printers. The performance information that is greater than the performance information of the printers is restricted from being chosen as an option. This is an example of the conflicting process since the performance information is being used to determine what paper size and other features are supported by the printers in the distributed printing option; see paragraphs [0178]-[0182] and [0225]-[0239]), the first user interface not including a setting item for independently setting for plurality of member printers grouped as the virtual printer (i.e. in the system, the “Distributed Printing Properties” tab sets a couple of options to be used in regards to a job being printed on a printer. This tab does not independently set an option for an individual printing device in the interface screen; see paragraphs [0178]-[0182] and [0225]-[0239]); and

second providing means for providing, when the virtual printer set to a second output method is designated (i.e. in the system, when the user is designating the recovery printer in the system, this is an example of designating a second output method on the user interface; see figs. 5 and 6; see paragraphs [0198]-[0212]), a second user interface of the virtual printer without performing the conflict process (i.e. within the “Distribution Setting” dialogue box, the system is performing settings of the virtual printer selected in figure 5. At this point in selecting the recovery printer or setting other printing options, the conflict process is not performed; see figs. 6, 32, 37 and 40; paragraphs [0198]-[0212] and [0367]-[0370]), the second user interface (a) including a setting item for independently setting a representative member printer of the

plurality of member printers (i.e. the Iwata '666 reference performs the function of including a setting item for a representative member printer of a plurality of member printers through the settings seen in figure 11. The different printers associated with the printer group can be set independently. If a printer is the only printer apart of a group, it can have settings associated with the printer changed. Also, this same printer can be apart of another group. The other group the printer may be apart of will not be effect by one printer's settings change within another group; see figs. 9 and 39-43, paragraphs [0225]-[0230] and [0373]-[0383]) and (b) not including a setting item for independently setting other member printers of the plurality of member printers grouped as the virtual printer (i.e. the distribution settings are options that the user can choose that do not change any specific setting of an independent printing device that is apart of some printing group such as "Monochrome printer". Instead, these settings are specific to the job itself and how this job is processed or distributed to other printing devices. The different tabs CD1 and CD2 can be displayed individually as they appear in Iwata '666 figures 6 and 9, or the tabs with the above features can appear all at once. With the tabs being able to be shown at the same time on the screen, the feature of having both screens allowing for independently setting a printing device and not including a setting for independently setting a member printer that is apart of the virtual printer; see figs. 39-43, paragraphs [0154]-[0157] and [0373]-[0390]).

However, Iwata '666 fails to specifically teach including a setting item for independently setting a representative member printer of the plurality of member printers grouped as the virtual printer.

However, this is well known in the art as evidenced by Iwata '665. Iwata '665 discloses a setting item for independently setting a representative member printer of the plurality of member printers grouped as the virtual printer (i.e. Iwata '665 like '666 discloses sending a job to a virtual printer to print out a job in a certain manner (same field of endeavor). However, as shown in figure 35, the user is able to select a printing device independently and change some of the settings related to the selected printing device; see ¶ [0294]-[0298]).

Therefore, in view of Iwata '665, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of As shown in figure 35, the user is able to select a printing device independently and change some of the settings related to the selected printing device, incorporated in the device of Iwata '666, in order to exclude certain printer that are apart of a printing group from a setting (as stated in Iwata '665 ¶ [0296]).

However, the combination of Iwata '666 and Iwata '665 fails to specifically teach and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs.

However, this is well known in the art as evidenced by Yagita '908. Yagita '908 discloses and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs (i.e. like the systems of Iwata '666 and '665, Yagita '908 discloses an invention that sends print jobs to a printer driver

Art Unit: 2625

associated with a certain printer (same field of endeavor). Nonetheless, the Yagita '908 reference discloses an output method that shows different printing devices used as alternate printing devices when an error is caused in a current printer. As shown in figure 25, the priority order is shown for each printer; see ¶ [0013], [0169]-[0175] and [0240]-[0257]).

Therefore, in view of Yagita '908, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of and (c) including a priority order for redirect printing of the plurality of member printers grouped as the virtual printer, the priority order for redirect printing displaying the order of automatic switching when an error occurs, incorporated in the device of Iwata '666, as modified by Iwata '665, in order to have a job be output by an alternate printer with the highest priority (as stated in Yagita '908 ¶ [0245]).

Re claim 22: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the apparatus according to claim 19, wherein the second user interface comprises a user interface of a printer driver of the representative member printer and a user interface of a printer driver of the virtual printer (i.e. shown in figure 5 is an example of a user interface that displays a printer driver of a printer that can be apart of a particular group and a virtual printer driver that represents a virtual printer;

see fig. 5; paragraph [0198]).

Re claim 23: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the apparatus according to claim 19, wherein the user interface of the printer driver of the virtual printer in the second output method contains a setting item for creating intermediate data (i.e. in the system, the information regarding the basic settings and the performance information of the respective printers represented by the virtual printer driver are all converted into print data for the virtual printer driver. The print data is then output to the HDD (41) as intermediate print data. The basic information regarding the printing and paper settings are converted into intermediate print data, and the printing and paper settings are considered as the setting items used for creating the intermediate data; see paragraphs [0231]-[0240]).

Re claim 25: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses a computer-readable recording medium having a computer-executable program stored thereon for executing the method according to claim 13 (i.e. the processing of the invention of Iwata '666 is performed using a computer program stored on a medium to be executed; see paragraphs [0231]-[0233]).

7. Claims 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata '666, as modified by the features of Iwata '665, as applied to claims 13 and 19, and further in view of Aritomi '751 (USP 7307751).

Re claim 18: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the method according to claim 13, further comprising a designation step of issuing, to the member printer, a designation of converting a drawing instruction based on intermediate data created on the basis of application data (i.e. in the system, the intermediate data created from the basic printing information and performance information from the application (100) is now being sent to the printer drivers to render and to the printers to actually print the rendered documents. The drawing commands are used to express figures or images to be rendered; see paragraphs [0176]-[0186]).

However, Iwata '666 fails to specifically teach converting a drawing instruction into a predetermined page description language.

However, this is well known in the art as evidenced by Aritomi '751. Aritomi '751 discloses converting a drawing instruction into a predetermined page description language (i.e. like the invention of Iwata, the Aritomi reference has an information processing apparatus send information to a printing device (same field of endeavor). However, Aritomi '751 discloses an invention that allows the user to interact with an interface to choose how print data is to be rendered. Aritomi also involves converting data into an intermediate format similar to Iwata '666. Both systems involve a user

using an interface with a printer driver to communicate with a connected printer.

However, in step S1606, the printer driver receives a drawing function and spools the drawing function as intermediate data. The printer driver then sequentially performs PDL conversion of the spool data to generate print data; col. 12, ln 11-19).

Therefore, in view of Aritomi '751, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of converting a drawing instruction into a predetermined page description language in order to convert spool data, based on intermediate data, into PDL to generate print data (as stated in Aritomi '751 col. 12, ln 11-19).

Re claim 24: The teachings of Iwata '666, Iwata '665 and Yagita '908 are disclosed above.

Iwata '666 discloses the apparatus according to claim 19, further comprising designation means for issuing, to the member printer, a designation of converting a drawing instruction based on intermediate data created on the basis of application data (i.e. in the system, the intermediate data created from the basic printing information and performance information from the application (100) is now being sent to the printer drivers to render and to the printers to actually print the rendered documents. The drawing commands are used to express figures or images to be rendered; see paragraphs [0176]-[0186]).

However, Iwata '666 fails to specifically teach converting a drawing instruction into a predetermined page description language.

However, this is well known in the art as evidenced by Aritomi '751. Aritomi '751 discloses converting a drawing instruction into a predetermined page description language (i.e. like the invention of Iwata, the Aritomi reference has an information processing apparatus send information to a printing device (same field of endeavor). However, Aritomi '751 discloses an invention that allows the user to interact with an interface to choose how print data is to be rendered. Aritomi also involves converting data into an intermediate format similar to Iwata '666. Both systems involve a user using an interface with a printer driver to communicate with a connected printer. However, in step S1606, the printer driver receives a drawing function and spools the drawing function as intermediate data. The printer driver then sequentially performs PDL conversion of the spool data to generate print data; col. 12, ln 11-19).

Therefore, in view of Aritomi '751, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of converting a drawing instruction into a predetermined page description language in order to convert spool data, based on intermediate data, into PDL to generate print data (as stated in Aritomi '751 col. 12, ln 11-19).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
9. Yacoub (USP 6552813) discloses directing print jobs in a network printing system.

10. Roosen (USP 7177040) discloses Remote printer control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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